U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT SNF Holding Explosion - Removal Polrep Initial and Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region IV

Subject:

POLREP #1

Initial / Final

SNF Holding Explosion

Riceboro, GA

Latitude: 31.7415170 Longitude: -81.4338000

To:

James Webster, USEPA R4 ERRPB

Jerry Campbell, GAEPD

From:

Chuck Berry, FOSC

Date:

4/2/2018

Reporting Period:

3/30/18 - 4/1/18

1. Introduction

1.1 Background

Site Number:

C441

Contract Number:

D.O. Number:

Action Memo Date:

Response Authority: CERCLA Response Type:

Response Lead: PRP

Emergency Removal Action

NPL Status:

Non NPI

Incident Category: Operable Unit:

1208052

Mobilization Date: 3/30/2018 Start Date:

3/30/2018 4/1/2018

Demob Date:

3/30/2018 Completion Date:

CERCLIS ID: ERNS No.:

RCRIS ID:

FPN#

State Notification:

Reimbursable Account #:

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

1.1.2.1 Location

The facility is located at 1 Chemical Plant Road in Riceboro, Liberty County, Georgia. The entrance to the plant is located at 31.741517, -81.4338.

1.1.2.2 Description of Threat

The materials in the reaction vessel were acrylic acid and sodium hypochlorite. However, based on the pH, approximately 4.5 s.u., the reaction appears to have progressed enough to remove the hypochlorite from the resultant gel. SNF reported a total of 9,000 pounds of acrylic acid was lost, independent of water content. Acrylic acid is a hazardous substance regulated by both the Toxic Substance Control Act and the Clean Air Act. Acrylic acid is severely irritating and corrosive to the skin and the respiratory tract. Eye contact can result in severe and irreversible injury.

The SNF plant is located in the Georgia coastal plain, and it situated on the Blackbeard Creek tidal marsh. The forested area past the retaining wall is listed on the US Fish and Wildlife National Wetlands Inventory as a PF01C (Palustrine, Forested, Broadleaf Deciduous, Seasonally-flooded) wetland. Approximately 460 feet past the retaining wall sits the marsh itself, which US F&W lists as a E2EM1P (Estuarine, Intertidal, Emergent, Persistent, and Irregularly-flooded) wetland.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

No preliminary inspections were performed.

2. Current Activities

2.1 Operations Section

2.1.1 Response Actions to Date

Immediately after the rupture, SNF initiated a response with their internal hazmat team and eventually increased its response resources by augmenting this this team with outside contractors. Restrictive covers were placed over the parking area's storm water drain inlets. Overnight and through Friday morning, SNF vacuumed up all of the gel from the parking area. A heavy rain both helped and hampered the response by mobilizing the gel to the collection areas but increasing the volume of material to manage. A gel impacted retaining wall was pressure washed by SNL, blowing the material back tothe gravel parking lot.

Air monitoring was performed throughout the response, with both a photo-ionization detector and a colormetric tube detector. SNF used Level C personal protective equipment for personnel working directly with the gel.

At approximately 1130 hours on Friday, March 30, EPA OSC berry arrived on site and discussed additional

2.1.2 Narrative

Upon arrival, OSC Berry met with plant environmental and safety personnel and discussed operations to date. OSC Berry then observed the ongoing response at the parking lot, witnessing some limited odor, although air monitoring indicated no detectable levels of acrylic acid in the air.

OSC Berry and the facility's safety officer then investigated the forest below the retaining wall to observe the impact to vegetation. OSC Berry observed brown discoloration and wilting on several small trees. Between 50 and 100 linear feet along the fence line was impacted. The general coverage was dappled, and only small specks of discoloration were observed on most leaves. No contamination appeared to have been ejected farther than 10 feet into the forest. Air monitoring on the impacted leaves showed a maximum of 1 ppm acrylic acid concentration and a pH of 4 s.u.. Total impact to the environment was minimal.

OSC Berry requested a consultation with the Department of the Interior concerning wetland protection. The OSC determined more damage would come from an attempted recovery than simply allowing the material to naturally breakdown. The resultant acrylates are nontoxic, and most of the vegetation looked stressed but recoverable. PH readings of the water draining this area were neutral, and pH readings of their storm water ponds were also neutral to slightly alkaline. The EPA Region 4 telephone duty consulted the DOI representative regarding the wetland impact.

SNF stated they planned on excavating the impacted gravel but only after completion of pressure washing operations on the roof, as runoff was expected to collect and impact the area again. Based on the facility's response to date, the facility's plan to continue the response, and the ability of the facility to provide personnel and equipment necessary to enact the plan, the EPA OSC demobilized from the site. Contamination within the facility would be removed in accordance with the facility's existing Resource Conservation and Recovery Act permits. SNF was asked to stay in contact with the OSC as the soil was excavated.

On Sunday, April 1, SNF reported they excavated approximately 8,100 square feet of the parking lot to an average depth of 2 inches. A total of 26 tons of material was taken to Superior Landfill in Savannah, GA, as non-hazardous waste. Also, a total of 15,190 gallons of acrylate-impacted water was sent through the onsite waste-water treatment system and was discharged according to the facility's NPDES permit.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Brent Hanson, Environmental Manager SNF Holding Company / Floquip 2 Chemical Plant Road Riceboro, GA 31323 912-884-8736

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Acrylate-impacted wastewater	Water	15,190 gal	NA	On-site WWTP	NPDES
Polyacrylamide / Polyacrylate contaminated soil (Non-Haz)	Soil	26 tons		None	Superior Landfill Savannah GA

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Additional response to the impacted facility components will be performed under the facility's RCRA permits.

2.2.1.2 Next Steps

2.2.2 Issues

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.